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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,723	06/19/2002	Horst Grochowski	PS-13393	9708

7590 06/23/2005

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EXAMINER	
STRICKLAND, JONAS N	
ART UNIT	**PAPER NUMBER**
1754	

DATE MAILED: 06/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/070,723	GROCHOWSKI, HORST	
	Examiner	Art Unit	
	Jonas N. Strickland	1754	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *2/19/03 and interview of 5/25/05*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *19-50* is/are pending in the application.

4a) Of the above claim(s) *40-47* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *19-39 and 48-50* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *3/02*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions, which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 19-39 and 48-50 are, drawn to a method of treating fluids.

Group II, claim(s) s 40-47 are, drawn to a fluid treatment apparatus .

2. The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The claims of Group I are directed towards a method of treating fluids, whereas the claims of Group II are directed towards a filter, having a shared horizontal charging channel, an outflow channel running laterally with respect to the charging channel, and a gas collection space, which are not featured in the process for treating the fluid.

3. During a telephone conversation with Robert Vicker on 5/25/05 a provisional election was made without traverse to prosecute the invention of Group I, claims 19-39 and 48-50. Affirmation of this election must be made by applicant in replying to this Office action. Claims 40-47 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Objections

4. Applicant is advised that should claim 24 be found allowable, claim 28 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two

claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 19-36, 38, 39 and 48-50 are rejected under 35 U.S.C. 102(b) as being anticipated by Grochowski (US Patent 5,603,907).

Applicant claims a method of treating fluids by use of at least one bulk material comprising flowing a fluid substantially through a plurality of bulk material beds, said fluid flowing from a bottom to a top of at least one bulk material bed; moving said at least one bulk material in at least one of said bulk material beds countercurrent to the flow of said fluid through at least one of said bulk material beds; at least partially adding said at least one bulk material to said top of said at least one bulk material beds so as to provide substantially even distribution of said at least one bulk material bed has been properly exchanged; and, operating a plurality of said bulk material beds in parallel such that said removing and said adding of said at least one bulk material in a plurality of said bulk material beds occurs successively.

Grochowski discloses a process and device for treating fluids by flowing fluid through a plurality of several bulk material beds from the bottom to the top of the bulk material bed (see abstract). Grochowski continues to disclose wherein the bulk material in at least one of the bulk material beds flows in a countercurrent flow to the fluid (col. 2, lines 30-42). The reference continues to disclose wherein some of the bulk material in each reaction chamber can be removed from the bottom and a replacement amount can be added successively (see abstract and col. 4, lines 17-40).

Therefore, it would have been anticipated to expect an even distribution of the bulk material, by adding at least one bulk material to the top of the bulk material bed, until there has been a proper exchange, because Grochowski clearly teaches wherein it is known in the art to add bulk material to the top of the bulk material bed. Grochowski continues to disclose wherein the bulk material level will be lowered within the reaction chamber wherein the fluid intake openings are closed, which means a plane-parallel layer of used bulk material can be removed and a corresponding quantity of bulk material can be introduced from the top (col. 6, lines 13-22).

The reference teaches with respect to claim 22, wherein bulk material may be added to the top of the reactor, without removing bulk material from the bottom of the bulk material bed (col. 3, lines 1-15). With respect to claims 24-26, the reference teaches bulk material delivery to a plurality of reaction chambers. With respect to claim 27, the reference teaches a collection bin (reception mechanism) to receive the removed bulk material (col. 5, line 43).

The reference also discloses wherein the fluid id interrupted or throttled (col. 6, lines 13-35). With respect to claims 33-36, the reference discloses wherein it is possible to use as effective bulk materials activated coke, as well as catalysts of inorganic compounds (col. 3, lines 48-53). The bulk materials are also layered (col. 4, lines 17-25). With respect to claims 38 and 39 see Figure 1, which discloses a container for bulk material delivery.

With respect to claims 48-50, Grochowski discloses having a first and second bulk material (see claim 9).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Grochowski (US Patent 5,603,907) in view of Romey et al. (US Patent 4,764,355).

Applicant claims with respect to claim 37, wherein the adsorbent includes activated coke and at least one chemically reactive component includes calcium hydroxide.

The teachings of Grochowski have been discussed with respect to claims 19-36, 38, 39, and 48-50. Grochowski discloses wherein activated coke may be used as an adsorbent, but does not teach specifically calcium hydroxide, but rather the use of catalytic inorganic compounds.

However, Romey et al. teaches a process for the removal of gaseous noxious matter from hot gases. Romey et al. continues to teach wherein it is known in the art to use calcium hydroxide and activated coke in a process for treating fluids (col. 2, lines 9-16).

Therefore, it would have been obvious to one of ordinary skill in the art, to modify the teachings of Grochowski, based on the teachings of Romey et al., by using activated coke and calcium hydroxide in a process for treating fluids, since Romey et al. teaches wherein it is known in the art to use calcium hydroxide and activated coke in a process for treating fluids. Such modification would have been obvious to one of ordinary skill in the art, because one of ordinary skill in the art, would have expected a process for treating fluid streams as taught by Romey et al., to have been similarly useful and applicable to a process for treating fluids, which teaches applying an activated coke and catalytic inorganic compounds as taught by Grochowski.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonas N. Strickland whose telephone number is 571-272-1359. The examiner can normally be reached on M-TH, 7:30-5:00, off 1st Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jonas N. Strickland
June 21, 2005

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